



303045



October 4, 2005

TO: Mr. Russell Hart, RPM
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated *DMC*

RE: **MONTHLY PROGRESS REPORT/MEMORANDUM**
Area 9/10 Remedial Design
Southeast Rockford Groundwater Contamination Superfund Site
Rockford, Illinois

Copies: Mr. Thomas Turner, Regional Counsel, USEPA Region V
Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation
Ms. Kathleen McFadden, United Technologies Corporation
Mr. Thomas Williams, PM, IEPA
Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*

Activities conducted in September 2005 consisted of the continuation of Pre-Design Investigation and conceptual design activities. There two areas of focus at this time with respect to the overall Remedial Design are the former RCRA Outside Container Storage Area (OSA) and the area beneath the Hamilton Sundstrand (HS) Plant #1.

A work plan for source mass removal in the OSA was submitted to USEPA and IEPA in April. The work plan provided an analysis of the Pre-Design Investigation data collected to date, the rationale for the source removal effort, and a description of the planned activities. The technical work plan was conditionally approved by USEPA in a letter dated August 15, 2005. However, in order to implement the plan, an administrative approval process needs to be implemented by and between USEPA and HS. USEPA, HS, and SECOR have discussed alternatives regarding how to best resolve this issue. HS has prepared and submitted a proposal to modify a portion of the text of the existing Administrative Order on Consent (AOC). This proposed change, if accepted could provide the administrative means for completion of this work.

The proposed OSA excavation activities are adjacent to and within the Illinois Central Railroad (ICR) easement. The ICR is owned by the Canadian National Railroad. SECOR, on behalf of HS, has initiated discussions with ICR for site and contractor access in accordance with ICR requirements. Completion of the access activities will be incumbent on administrative mechanism of approval being completed. Other activities in September have included continued administrative preparations for the implementation of the OSA source reduction activities to enable efficient implementation upon approval. Modifications to the work plan in accordance with the USEPA's "technical approval" letter dated August 15, 2005 are also being undertaken.

MONTHLY PROGRESS REPORT/MEMORANDUM

Area 9/10 Remedial Design

Southeast Rockford Groundwater Contamination Superfund Site

Rockford, Illinois

October 4, 2005

Page 2

The second area of focus is the area beneath the HS facility identified as a location of potential source material based on down-gradient groundwater monitoring results. The most likely location of the potential source material is associated with the former area of underground storage tanks (USTs) which were in the central portion of the plant south of the loading dock area. With access to the inside of the building unavailable, alternative means have been explored and horizontal drilling appears to be the most effective method of infrastructure installation.

A preliminary conceptual design for horizontal wells and pilot testing letter was submitted to USEPA and IEPA in May 2005. This letter provided an overview of the currently envisioned potential horizontal well and pilot testing treatment corridor. The plan outlined the optimal installation and treatment area without consideration of access constraints (both off-site and on the property).

Pilot testing of the horizontal wells will be a necessary part of the overall remedial design. The horizontal air sparge (AS) and soil vapor extraction (SVE) wells that are planned for pilot testing will likely become part of the final remedial design. This is consistent with a final remedial system design utilizing the Record of Decision (ROD) prescribed technologies for Area 9/10.

Off-site access for horizontal drilling will be required. Access to the property to the south of the plant (2525 11th Street) and beneath the Illinois Central Railroad spur line north of the plant will be necessary. The ICR access for horizontal wells will be discussed after approval for the OSA excavation activities are confirmed.

To facilitate the preparation of the work plan for the AS and SVE horizontal well installation and pilot testing, the installation of a horizontal groundwater monitoring well beneath the facility has been proposed. Knowledge of the concentrations of various constituents of concern in groundwater will assist in the pilot test work plan development effort.

A brief horizontal groundwater monitoring well work plan is being prepared which outlines the scope of work to be undertaken. This brief plan will provide specific well installation, well development, and the baseline sampling to be performed. Prior to submittal of the horizontal monitoring well work plan, the new property owner to the south (2525 11th Street) and ICR will be contacted regarding access for the installation and future operation of the horizontal groundwater monitoring well and other pilot test wells. If successful, this effort will confirm the viability of the optimal locations previously identified. If access is denied, HS will request assistance from USEPA and/or IEPA in this matter. As well, if access conditions indicate that logistic modifications are required, alternate locations and alignments may be developed. The anticipated submittal date for the horizontal groundwater monitoring well work plan is late October or November 2005 to allow time to resolve the OSA approval conditions prior to final access discussion with ICR. The data from the horizontal groundwater monitoring well will be used as input for the development of the AS and SVE horizontal well pilot test infrastructure and test procedures.

SECOR

MONTHLY PROGRESS REPORT/MEMORANDUM

Area 9/10 Remedial Design

Southeast Rockford Groundwater Contamination Superfund Site

Rockford, Illinois

October 4, 2005

Page 3

The operation and monitoring of hydrocarbon recovery of LNAPL (JP-4) from the recovery systems in the south alley continues. Based on water level measurements taken from monitoring wells, there has been a noticeable drop in the elevation of the water table over the summer months. This lowering is attributable to the general lack of any significant rainfall during this period. The lowering of the water table has produced conditions which have resulted in separate phase hydrocarbons to be observed in the recovery wells in the south alley in September. Levels identified have varied, but have generally been in the tenths of feet. Recovery systems are being monitored closely for the collection of the observed product.

FUTURE PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*

Future project activities anticipated for October 2005 and beyond include:

- Continue to collect water levels from the groundwater monitoring network on a periodic basis.
- Discussion toward resolution of the administrative issue associated with the approval of the OSA work plan by USEPA/IEPA. Assuming that an acceptable administrative mechanism can be identified and properly approved in a timely manner it is anticipated that this effort will still be implemented in the fall of 2005.
- Provide a revised OSA Work Plan for Source Reduction incorporating the all comments and modifications.
- Fully engage ICR in final site access and approval discussions upon completion of USEPA administrative approval of OSA Work Plan for Source Reduction. Initial contacts have already been made.
- Continue on-going logistical preparation activities for the implementation of the OSA Work Plan for Source Reduction.
- Upon resolution of the administrative issue associated with the approval of the OSA work plan, SECOR will commence final preparations for completion of the work. These activities will include HRC-X procurement and placement, short term groundwater monitoring to confirm changes in the aquifer electron acceptor concentrations, well abandonment, and secure commitment dates from excavation and transportation contractors for work plan execution.
- Continue to compile the Pre-Design Investigation data into the Data Summary Report. This report will include boring logs, figures, groundwater flow information, and all laboratory analyses undertaken as part of the Pre-Design Investigation.
- Monitoring and evaluation of LNAPL (JP-4) presence and recovery at the eastern end of the South Alley will continue.
- Engage the new property owner to the south and ICR regarding access for horizontal well installations, pilot test access, and longer term AS and SVE system operation.
- Continue to develop the brief scope of work/work plan for the installation, development, and baseline sampling of a horizontal groundwater monitoring well.

MONTHLY PROGRESS REPORT/MEMORANDUM

Area 9/10 Remedial Design

Southeast Rockford Groundwater Contamination Superfund Site

Rockford, Illinois

October 4, 2005

Page 4

As a matter of note, off-site (non HS property) access has been and continues to be a potential area of concern. The current proposals (OSA source reduction and horizontal SVE and AS system) require the use and modifications to off-site properties. Although the nature of the impact to these properties will be designed to be as minimal as possible, there could be resistance from these off-site property owners for these efforts. HS is/will pursue access as is currently deemed necessary with these off-site entities. If it becomes apparent that progress towards access is not being made, access is being denied, or unreasonable access conditions are being imposed, HS will inform USEPA and seek assistance for reasonable resolution.

SAMPLE/TEST DATA SUBMITTALS:

No data submittals are included with this memorandum.

RD SCHEDULE UPDATE: *(attach updated schedule as necessary)*

As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. A scope of work concerning the source mass reduction (by excavation) of near surface impacted soils in the OSA was submitted to the USEPA and IEPA in April 2005. Based on comments and responses, the (technical) work plan was approved with conditions in August. The administrative approval process is currently underway. This source mass reduction activity is anticipated to take place upon resolution of this issue and may occur in the Fall of 2005 if a timely solution can be agreed by all parties.

Access to potential source materials beneath the HS facility building will require the use of horizontal drilling. As mentioned previously, off-site access will be required for implementation of this technique. Access to off-site properties presents a potential to affect the schedule for implementation. HS is working on logistical issues associated with this drilling technology and will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

REALIZED/ANTICIPATED PROBLEM CONDITIONS:

None.

PERSONNEL CHANGES:

None.